

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-2. (cancelled)

3. (currently amended) Braking system (S) according to Claim ~~[[1]]~~ 18, characterised in that it comprises specific energy absorption/dissipation means (10, L, 12; 13 to 16; 19 to 21), in addition to ~~the energy dissipation means constituted by the friction between~~ the teeth of the wheel (6) and the thread of the worm (8).

4. (original) Braking system (S) according to Claim 3, characterised in that the said specific energy absorption/dissipation, means comprise a sliding mounting of the worm in the said bore and energy absorption/dissipation means (10, L, 12) associated with this worm (8) and actuated by it upon its sliding.

5. (currently amended) Braking system (S) according to claim 4, characterised in that the said associated energy absorption/dissipation means comprise at least one resilient means, ~~such as a spring (10),~~ interposed between at least one end of the worm (8) and the walls ~~of the part (1)~~ delimiting the bore.

6. (currently amended) Braking system (S) according to claim 4, characterised in that the said associated energy absorption/dissipation means comprise:

- a liquid (L) contained in the space delimited by at least one piston (8a), against which one end of worm (8) comes to bear, and the walls of the said part (1) delimiting the bore, and
- one or more ~~conduits (12) and/or interstices~~ paths for this liquid (L) to escape upon the sliding of the worm (8), this or these ~~conduits (12) and/or interstices~~ paths having ~~reduced~~ sections suitable for allowing the said liquid (L) to escape only over a non- instantaneous time interval.

7. (currently amended) Braking system (S) according to Claim 6, characterised in that the said one or more ~~conduits (12) and/or interstices~~ paths comprise means (15) for ~~adjusting~~ adjusting the flow of liquid (L).

8. (withdrawn/currently amended) Braking system (S) according to Claim 6, characterised in that the said one or more ~~conduits (12) and/or interstices~~ paths comprise means (16) for preventing the return of this liquid (L), which make it possible to obtain a different damping for each sliding direction of the worm (8).

9. (currently amended) Braking system (S) according to Claim 7, characterised in that the means (15, 61, 62) for adjusting the flow rate of the liquid (L) comprise a ring (60) secured to the screw (8), a tubular member (61), engaged

adjustably through this ring (60) and a rod (62) engaged adjustably in the tubular member ~~[[61]]~~ (61), the tubular member (61) and the rod (62) having radial holes (67, 68, 73, 74) communicating with each other, the rod (62) having grooves (76) extending in the circumferential direction and of variable depth, and being adapted to be disposed in a predetermined angular position relative to the ~~rod 61~~ tubular member (61).

10. (currently amended) Braking system (S) according to claim 4, characterised in that it includes ~~sensors~~ a sensor or ~~detectors of~~ detector that measures the sliding of the worm (8), ~~which actuate command or control means which act on~~ and communicates with the means for driving the said one or more rotating members (34).

11. (previously presented) Braking system (S) according to claim 3, characterised in that the said specific energy absorption/dissipation means comprise friction connecting means (19 to 21) between the toothed wheel (6) and its hub or between the toothed wheel (6) and the shaft receiving this wheel (6), freeing the pivoting of this wheel (6) with respect to this hub beyond a certain torque threshold, with friction.

12. (currently amended) Braking system (S) according to claim 3, ~~characterised~~ characterized in that the said specific energy absorption/dissipation means comprise a ~~flexible and/or floating~~ mounting of the braking system (S) with respect to the frame which contains it.

13. (previously presented) Braking system (S) according to claim 3, characterised in that it comprises an electronic controller (40) for controlling the maximum speed of the motor (5) for actuating the worm (8).

14. (original) Braking system (S) according to Claim 13, characterised in that the supply to the motor (5) and the control of the speed thereof are performed separately from those of the motor (30) of the mechanism, by means of an electronic controller (50) and a controller (51) having an independent link to the control station (42) of the mechanism, this control station (42) delivering redundant information to the said controller (51).

15. (currently amended) Braking system (S) according to Claim [[2]] 19, characterised in that it comprises specific energy absorption/dissipation means (10, L, 12; 13 to 16; 19 to 21), in addition to the energy dissipation means constituted by the friction between the teeth of the wheel (6) and the thread of the worm (8).

16. (currently amended) Braking system (S) according to claim 5, characterised in that the said associated energy absorption/dissipation means comprise:

- a liquid (L) contained in the space delimited by at least one piston (8a), against which one end of worm (8) comes to bear, and the walls of the said part (1) delimiting the bore, and

- one or more ~~conduits (12) and/or interstices~~ paths for this liquid (L) to escape upon the sliding of the worm (8), this or these ~~conduits (12) and/or interstices~~ paths having ~~reduced~~ sections suitable for allowing the said liquid (L) to escape only over a non- instantaneous time interval.

17. (withdrawn/currently amended) Braking system (S) according to Claim 7, characterised in that the said one or more ~~conduits (12) and/or interstices~~ paths comprise means (16) for preventing the return of this liquid (L), which make it possible to obtain a different damping for each sliding direction of the worm (8).

18. (new) Braking system (S), intended to be fitted to a mechanism, with one or more rotating members (34), comprising a toothed wheel (6), connected rotationally with respect to at least one rotating member (34) to be braked, and a worm (8), driven rotationally by a motor (5) upon the rotation of the rotating member (34), this worm (8) being permanently in mesh with the toothed wheel (6); characterized in that the worm (8) is contained in a bore with a diameter sufficiently close to that of the worm (8), such that this worm is maintained in a radial direction with respect to the toothed wheel throughout its length, and is consequently able to take up the stresses exerted on it by the toothed wheel in a radial direction without any damage.

19. (new) Braking system (S) according to claim 18, characterized in that the worm (8) comprises at least one cylindrical bearing surface (8a) coaxial with its threaded portion, and the cylindrical bearing surfaces have a diameter such that the thread of the worm thus does not bear against the wall of the part which delimits the bore.